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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|--------------------------|---------------------|------------------|
| 09/931,352 | 08/16/2001 | Hugo Jean Marie Demeyere | 8215 | 3589 |

27752 7590 01/11/2005

THE PROCTER & GAMBLE COMPANY
INTELLECTUAL PROPERTY DIVISION
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EXAMINER

CHORBAJI, MONZER R

ART UNIT PAPER NUMBER

1744

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/931,352

Applicant(s)

DEMEYERE ET AL.

Examiner

MONZER R CHORBAJI

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 June 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This general action is in response to the application filed on 08/16/2001

Claim Rejections - 35 USC § 102

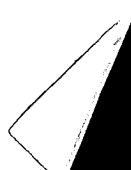
1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5, 7-10, 13, 16-17 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Masahiro (JP 08010568).

With respect to claims 1 and 2, the Masahiro reference discloses a method for removing fumigant methyl bromide and hydrogen bromide from exhaust gas (industrial application, 0001), which is a highly organic volatile gas having a sweetish chloroform-like odor. The first stream is considered a stream containing the halogen bromine, whether in methyl bromide form or in hydrogen bromide form. The Masahiro reference contacts the odorous methyl bromide stream (first stream) in drawing 1 with aqueous beta-cyclodextrin solution (paragraph 0007) then removes hydrogen bromide, which has a sharp irritant odor (first stream) in step 14 in drawing 1 by contacting the stream with aqueous sodium hydroxide solution (second stream). The second stream is neutralized then discharged. The word "discharged" includes releasing the neutralized aqueous solution into the environment since the reference teaches treating the solution and recognizes the importance of not polluting the atmosphere. Thus, discharging the second stream to the atmosphere is an inherent property of this reference.



With respect to claims 3-5, the Masahiro reference teaches that the first stream (methyl bromide) is gaseous stream, the second stream is a liquid stream (aqueous sodium hydroxide solution) and the first stream (aqueous methyl bromide solution) in 12 in drawing1 is a liquid stream.

With respect to claims 7-10, 13, 16-17 and 19, the Masahiro reference teaches that the gaseous first stream, which is dispersed into the atmosphere (11), is contacted with an aqueous beta-cyclodextrin solution in a spray form that is inherently in monomeric form (paragraphs 0006-0010).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

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were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 6, 12 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masahiro (JP 08010568) in view of Fetzer (U.S.P.P. 5,190,663).

The teachings of the Masahiro reference have previously been set forth with respect to claims 1-5, 7-10, 13, 16-17 and 19. With regard to claims 6, 12 and 14-15, the Masahiro reference fails to teach treating waste process water with cyclodextrin derivatives. The Fetzer reference, which is in the art of reducing the concentration of hydrocarbons in aqueous streams, teaches treating waste process water (col.1, lines 8-12) with cyclodextrin derivatives (col.3, lines 65-67). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of the Masahiro reference by adding cyclodextrin derivatives to waste process waters as taught by the Fetzer reference in order to remove polynuclear aromatic hydrocarbons (col.1, lines 8-22), which are considered pollutants.

7. Claims 11 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masahiro (JP 08010568) in view of Shinji (JP 01046466).

The teachings of the Masahiro reference have previously been set forth with respect to claims 1-5, 7-10, 13, 16-17 and 19. With regard to claims 11 and 18 the Masahiro reference fails to teach contacting aqueous cyclodextrin solution with gaseous

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stream after the gaseous stream has been contacted with the liquid stream and also fails to teach a concentration range for the cyclodextrin. With regard to claims 11 and 18, the Shinji reference, which is in the art of deodorizing indoor atmosphere, teaches contacting aqueous cyclodextrin solution with gaseous stream (A and 2) after the gaseous stream has been contacted with the liquid stream (C and 7) and also teach a concentration range for the cyclodextrin (abstract, lines 9-10). As a result, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of the Masahiro reference by first contacting gaseous stream with a liquid stream followed by wet treatment as taught by the Shinji reference in order to efficiently remove organic solvents or malodorous components volatilized into an indoor atmosphere (abstract, lines 1-3).

8. Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masahiro (JP 08010568) in view of Mikasa (JP 55147597).

The teachings of the Masahiro reference have previously been set forth with respect to claims 1-5, 7-10, 13, 16-17 and 19. With regard to claims 20-22 the Masahiro reference fails to teach incorporating compounds recited in claims 20-22; however, the Mikasa reference teaches adding to an aqueous cyclodextrin solution a perfume, a surfactant, a deodorant, a cleaner and other compounds (abstract, lines 1-6) such that determining the proper concentration, is a matter of routine experimentation. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of the Masahiro reference by including, for example, a

perfume and other compounds as disclosed by the Mikasa reference in order to provide a cleaning and deodorizing compound (abstract, lines 1-6).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Wernick et al reference (U.S.P.N. 4,426,292) teaches using cyclodextrin to separate components in gaseous and liquid states.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MONZER R CHORBAJI whose telephone number is (571) 272-1271. The examiner can normally be reached on M-F 6:30-3:00.

11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ROBERT J WARDEN can be reached on (571) 272-1281. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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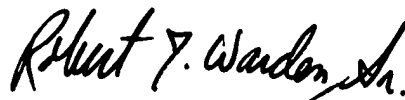
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Monzer R. Chorbaji *MRC*

Patent Examiner

AU 1744

01/07/2005



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